LISTING OF THE CLAIMS

This listing of claims, including the amendments indicated below, replaces all prior versions, and listings, of claims in the application

1. (Currently Amended) A hydrodynamic brake comprising

a stator comprising an annular stator shell with a multiplicity of stator blades in and arrayed around the stator shell;

a rotor comprising an annular rotor shell with a multiplicity of rotor blades in and arrayed around the rotor shell; the annular stator and rotor shells being so shaped and arranged that they form a toroidal space with the stator and the rotor blades in the space, whereby a medium supplied to the toroidal space effects a braking action on the rotor; the space having a first and a second inlet and having an outlet;

a storage space for a medium which is intended to be supplied to the toroidal space;

a first pipe circuit coupled between the outlet from the toroidal space [[to]] and the first inlet to the toroidal space; [[and]]

a second pipe circuit coupled between the storage space and the second inlet; and

a driver for the medium in the second pipe circuit,

wherein a fluid pressure in the second pipe circuit provided by the driver during operation of the brake is always substantially lower than a fluid pressure in the first pipe circuit.

2. (Previously Presented) A hydrodynamic brake according to claim 1, wherein the second inlet includes an input hole situated in a low pressure region of the toroidal space where the pressure during a braking process of the brake is always substantially lower than the pressure of the medium in the first pipe circuit.

3. (Previously Presented) A hydrodynamic brake according to claim 2, wherein the pressure in the low pressure region corresponds substantially to atmospheric pressure.

4. (Previously Presented) A hydrodynamic brake according to claim 2, wherein the input hole of the second inlet is situated substantially centrally in the toroidal space.

5. (Previously Presented) A hydrodynamic brake according to claim 4, wherein the input hole of the second inlet is situated adjacent to a free end portion of one of the blades.

6. (Previously Presented) A hydrodynamic brake according to claim 5, wherein the input hole of the second inlet is situated in one of the stator blades.

7. (Currently Amended) A hydrodynamic brake according to claim 1, ~~further comprising~~ wherein the driver is a pump in the second pipe circuit for transferring the medium to the toroidal space.

8. (Previously Presented) A hydrodynamic brake according to claim 7, wherein the pump is a gear pump.

9. (Previously Presented) A hydrodynamic brake according to claim 1, wherein the first inlet to the toroidal space includes an input hole situated in a radially outer region of the stator.

10. (Previously Presented) A hydrodynamic brake according to claim 9, wherein the outlet from the toroidal space includes an output hole situated in a radially outer region of the stator.

11. (Previously Presented) A hydrodynamic brake according to claim 10, wherein the second inlet includes an input hole situated in a region of the toroidal space where the pressure during a braking process of the brake is always substantially lower than the pressure of the medium in the first pipe circuit.

12. (Previously Presented) A hydrodynamic brake according to claim 1, wherein the outlet from the toroidal space includes an output hole situated in a radially outer region of the stator.

13. (Previously Presented) A hydrodynamic brake according to claim 2, wherein:

the outlet from the toroidal space includes an output hole situated in a radially outer region of the stator; and

the input hole of the second inlet is situated substantially centrally in the toroidal space.

14. (Currently Amended) ~~A hydrodynamic brake according to claim 7, wherein the pump operates continuously, and further including~~

A hydrodynamic brake comprising

a stator comprising an annular stator shell with a multiplicity of stator blades in and arrayed around the stator shell;

a rotor comprising an annular rotor shell with a multiplicity of rotor blades in and arrayed around the rotor shell; the annular stator and rotor shells being so shaped and arranged that they form a toroidal space with the stator and the rotor blades in the space, whereby a medium supplied to the toroidal space effects a braking action on the rotor; the space having a first and a second inlet and having an outlet;

a storage space for a medium which is intended to be supplied to the toroidal space;

a first pipe circuit coupled between the outlet from the toroidal space to the first inlet to the toroidal space; and

a second pipe circuit coupled between the storage space and the second inlet;

a continuously operating pump in the second pipe circuit for transferring the medium to the toroidal space; and

a valve operable to direct fluid through the second pipe circuit to the second inlet when a braking operation is required.

15. (New) A hydrodynamic brake according to claim 2, wherein the driver continuously circulates the medium through the second piping circuit, and further including a bypass mechanism operable to direct the medium circulating in the second pipe circuit to the second inlet when a braking operation is required.

16. (New) A hydrodynamic brake according to claim 1, wherein the first inlet includes a series of input holes respectively associated with each of a series of stator blades, and the second inlet is comprised of a single hole situated adjacent to a free end portion of one of the stator blades.